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DIVIDEND POLICY, LIQUIDITY CONSTRAINTS AND FIRM INVESTMENT IN NIGERIA: AN EMPIRICAL ANALYSIS

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ABSTRACT
This study appraised the importance of dividend policy of firm investment and liquidity constraints in Nigeria. To enable an empirical comparison of the findings, a critical review of related literatures was carried out. A survey research method used for the study and the data employed was derived from the annual publications of financial institution in Nigeria. The analytical tool used in analysis data obtained for the study is regression analytical tool. The empirical results reveal that investment has a significant effect on the dividend policy of firms in Nigeria. More so, liquidity has effect on dividend policy firms in Nigeria but not significant.

KEYWORDS: Dividend, Investment, Liquidity, Earnings per share, Cash ratio, Dividend per share

INTRODUCTION

The topic of dividend policy is one of the most enduring issues in modern corporate finance. This has led to the emergence of a number of competing theoretical explanations for dividend policy (Al-Malkawi, 2007). This has attracted a lot of controversies and many academic interests (Samuel and Inyada, 2010; Li *et al*., 2006; Gordon, 1959). Dividends are not just an outcome of a firm payout policy; they reflect a complicated combination of investment strategy, financial decision and private information (Miller and Rock, 1985). From managerial perspective, dividend can serve as a tool to mitigate agency problem by digesting extra free cash flows (Jensen, 1986), or to signal to the market that only good quality firms afford to pay dividends (Bhattacharya, 1979). On the other hand, from the investors' prospective, dividends are beneficial since they represent a regular income stream which will enhance self-control by avoiding any irrational trades (Shefrin and Statman, 1984).

Focusing on the implications for dividends, Higgins (1972) later found that dividends varied positively with earnings but negatively with investment. Dhrymes and Kurtz (1967) found that a firm's desire to maintain stable dividends may hamper investment by reducing internal funds available for capital expenditure. Furthermore, their results suggest that investment needs have an influence on dividends, with greater investment reducing dividends payment as predicted by a residual policy (Elston, 1995; Alli *et al*., 1993; Keown *et al*., 2002). Devereux and Schiantarelli (1989) and Bhattacharya (1988) point out that without explicitly modeling the dividends policy of the firm, it is not possible to tell which firms constrained by their earnings. In line with the above findings, what then is the major determinant of dividends policy? Does working capital has any effect on dividend policy in Nigeria?

The objective of this study is to appraise the importance of dividend policy on firm investment and liquidity constrains in Nigeria. Specifically, this study attempted to:

i. Examine the effect of investment on dividend policy of firms in Nigeria.
ii. Examine the effect of liquidity constraints on dividends policy of firms in Nigeria.

The null hypothesis formulated and tested for the study are:

i. Liquidity constrains has no significant effect on dividend policy of firms in Nigeria.
ii. Investment has no significant effect on the dividend policy of firms in Nigeria.

LITERATURE REVIEW

Researchers on corporate dividend policy have over the years followed two divergent paths. Some researchers have followed a behavioral approach by survey the opinion of corporate managers in order to gain insight in to the factors they consider most important in determining their firms' dividend policy (Musa, 2009). Studies in the category include the works of Baker *et al.* (1988), Farrelly *et al.* (1986), Baker and Farrelly (1988), Pruit and Gitman (1991), Baker and Powell (1999 and 2001) and Mainoma (2001). These studies found that different managers at different times attach varying importance to the factors that influence a firm's dividend decision.

Some researchers on the other hand followed a normative approach and developed and empirically tested various mathematical models in order to explain the dividend policy of firms. Lintner [1956] was the first researcher to develop and test the partial adjustment model of dividend. His model suggests that change in dividends is a function of the target dividend payout multiplied by the speed of an adjustment factor. This is expressed mathematically as:

$$DIV_t = a + bpEPS_t + (1\text{-}b)\, DIV_{t-1} + e_t$$

Where DIV_t is next year's dividend, *a* is the intercept; b is the speed of adjustment of current dividends to the target (and lies between zero and one), *p* is the target payout ratio, *EPS* is earnings per share in the next year, DIV_{t-1} is the previous dividend, while e is the error term. Several other empirical works in both developed and emerging economies have tested the modified version of Lintner's model after refining and restating the models or after extending it. These include the works of Darling (1957); Brittain (1964); Oyejide (1976); Dhameja (1978); Crum *et al.* (1988); Simons (1994) and Adelegan (2000).

According to Black (1976); Dempsey, Laber and Rozeff (1993); Litzenberger and Ramaswamy (1982); Brigham and Gapenski (2002) and Van Horn (2001), the relationship between cash dividend announcements and share prices is not obvious. The announcement of cash dividends signals information to investors that include the company's efficiency such as the profitability, liquidity and investment opportunity (Hansen, *et al.*, 1994; Miller, 1999; Black, *et al.*, 1995; DeAngelo and DeAngelo, 1990 and Alli *et al.*, 1993). Dividends may also serve as a mechanism to reduce cash flow under management control, and thus help to mitigate the agency problems (Al-malkawi, 2007). Reducing funds under management discretion may result in forcing them into the capital markets more frequently, thus putting them under the scrutiny of capital suppliers (Rozeff, 1982; Easterbrook, 1984).

MATERIALS AND METHODS

A survey research method was used for the study. The data employed in this study was derived from the annual publications of financial institutions in Nigeria. Though, relevant literatures including periodicals and journal articles giving clues on dividend policy, investment and liquidity constraints also provide veritable data for the analysis. The methodology was empirical as it implores statistical tools in analyzing data obtained for the study. The analytical tools used in analyzing the data collected for the study is regression analytical technique. It has the potential of predicting the values of the dependent variable given values of the independent variables (Martin and Firth, 1983). The population of the study consists of all staff of financial institutions in Nigeria quoted on the Nigeria Stock Exchange (NSE). A systematic sampling technique was used to select twenty financial institutions in Nigeria.

Model Specification

The models built for the purpose of analysis for this study are as follows:

(i) $DPS = a + \beta CR + \varepsilon$

(ii) $DPS = a + \beta EPS + \varepsilon$

Where DPS is dividend per share, an indicator representing dividend policy; CR is cash ratio, an indicator representing liquidity and EPS stands for earnings per share. This is an indicator representing investment. a is the intercept of the regression line; β is the partial coefficient associated with independent variable and ε is the stochastic error term.

RESULTS AND DISCUSSION

Table 1 and Table 2 show the model summary and coefficient of the dependent and independent variable used to determine the effect of liquidity constraint on dividend policy of firms in Nigeria via SPSS package (version 17.0).

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of Estimate	Sig.
1	0.072	0.005	-0.071	0.55065	0.799

Source: SPSS Output File

Table 2: Coefficients

Model	Unstandardized Coefficients		Standard Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.651	0.199	-	3.275	0.006
CR	0.033	0.126	0.072	0.260	0.799

Source: SPSS Output File

Table 1 and Table 2 above show the correlation between liquidity constraint and dividend policy. The correlation shows a positive relationship between the variables. In table 1, the value of R, coefficient of correlation, is 0.072. This indicate a positive but weak relationship between the dependent and independent variable while the coefficient of determination, R^2 is 0.005 which mean that about 99.5% of the dependent variable is accounted for by the independent variable and the remaining 0.5% is accounted for by the other variable. In table 2 the regression coefficient is 0.033 and the t statistic is 0.260. The level of significance is 0.799; that is 79.9% significant level. That means 20.1% confidence interval which means that it not significant because it's less than 95% confidence level and more than 5% significant level.

Therefore, the null hypothesis which states that liquidity has no significant effect on dividend policy is hereby accepted. Though, there exist a positive relationship but it is not significant.

Table 3 and Table 4 show the model summary and coefficient of the dependent and independent variable used to determine the effect of investment on dividend policy of firms in Nigeria via SPSS package (Version 17.0).

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of Estimate	Sig.
1	0.706	0.498	0.460	0.39103	0.003

Source: SPSS Output File

Table 4: Coefficients

Model	Unstandardized Coefficients		Standard Coefficients	t	Sig.
	B	Std.Error	Beta		
1 (Constant)	0.60	0.202	-	0.298	0.771
EPS	0.317	0.088	0.706	3.594	0.003

Source: SPSS Output File

The result in Table 3 shows that the value of correlation coefficient 0.706. This is a positive but moderate correlation between the dividend policy and investment of firms in Nigeria. The coefficient of determination is 0.498, that is, 49.8% which mean about 50.2% of the dependent variable (dividend) is accounted for by the independent (investment) and the remaining 49.8% is accounted for by other variables. In table 4, the coefficient of correlation (beta) is 0.706 and regression coefficient is 0.317. The coefficient of correlation shows a positive relationship but moderate while the t statistics is 3.594. The significance level in Table 3 and 4 is 0.003 which is 0.3%. This mean 99.7% confidence level. This mean it is significant because it is less than 5% significant level and more than 95% confidence level. Therefore, the null hypothesis which states that investment has no significant effect on the dividend policy of firms in Nigeria is hereby rejected.

CONCLUSION

This study provides preliminary empirical evidence suggesting that financial decisions of Nigerian firms are not independent. It examined the effect of liquidity constraints and investment on dividend policy of firms in Nigeria specifically limited to financial institutions. Based on the results of the study, it can be deduced that the study is consistent with the findings of Mainoma (2001); Alli *et al*. (1993); Simons (1994); Crum *et al*. (1988) etc. This study provides additional evidence that investment, liquidity has effect on dividend policy of firms in Nigeria.

Secondly, there is a positive relationship between dividend policy and liquidity but it's not significant. Investments have significant effect on dividend policy of firms in Nigeria.

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